p=0,038) and there was trend to higher E/E' ratio in the SR group (7,7±1,6 vs 9±3,3cm/s, p=0,46).

Conclusions There's no evidence for early LA remodeling after LAAPC, but diastolic function might be negatively influenced by LAAPC suggesting the potential role of LAA in atrial function. Further studies are warranted to confirm the prelimary results.

The author hereby declares no conflict of interest

0382

Should we refine the definition of valvular atrial fibrillation based on echocardiographic criteria? A single center cohort study with mid-term follow-up

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Purpose The lack of justification for the various definitions used to characterize valvular atrial fibrillation (VAF) in clinical trials and guidelines lead us to evaluate a strict definition of VAF using echocardiographic-derived classification. We thus sought to investigate whether this pragmatic approach could be useful to predict the risk of stroke and death in such patients.

Methods Between 1998 and 2011, 172 patients, hospitalised for symptomatic VAF were enrolled in the cohort. The CHA_2DS_2-VASc score was determined at admission. Echocardiographically significant valve disease was defined as: mitral stenosis (mitral valve area <2cm^2), mitral regurgitation grade 3 or 4, aortic regurgitation grade 3 or 4, tricuspid regurgitation grade 3 or 4, aortic stenosis (valve area <1.5cm^2) or mechanical valve prostheses. All patients were followed-up at least 6 months and cardiovascular events recorded. The composite endpoint was defined as the first occurrence of stroke or death.

Results Mean age was 72±15 years. Among VAF, 55 had aortic valve (AV), 94 mitral valve (MV) and 23 both AV and MV involvement. There were significant differences with regard to sex, age, type of AF and CHA_2DS_2-VASc score (p<0.0001). During a mean follow-up of 5.1±3.7 years, patients with AV experienced 29 (52.7%), MV patients (49, 52.1%) and both AV + MV, 15 (65.2%) stroke or death events. The Kaplan-Meier curves (figure) show that patients with both AV and MV AF and a CHA_2DS_2-VASc score ≥2 were at higher risk of stroke or death.

Conclusion These preliminary results suggest that valvular AF should be defined based on echocardiography and that the highest risk of stroke and death is observed in patients with both aortic and mitral valve involvement and a CHA_2DS_2-VASc score ≥2.

The author hereby declares no conflict of interest

0488

Assessment of aortic regurgitation severity: a cardiac magnetic resonance and echocardiographic comparison study

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Background Assessment of chronic aortic regurgitation (AR) severity remains challenging. While transthoracic echocardiography (TTE) is the most widely used method, velocity-encoded phase-contrast magnetic resonance (PCMR) imaging in the ascending aorta for flow quantification is considered the gold standard method to calculate the regurgitant volume (Reg Vol). The aim of our study was to compare the AR severity by TTE and PCMR in a large serie of consecutive patients with aortic valvular heart disease (VHD).

Methods and results between 2007 and 2014, 283 patients underwent clinically indicated TTE and PCMR (Philips ACHIEVA 1.5 Tesla) within 30 days. Multiparametric approach was used by TTE (vena contracta, pisa method and semi-quantitative method) to grade AR severity. Mean age was 81±9 years, 53% were male. LVEF was not significantly different between TTE and CMR (55±13% and 53±15%); mean trans aortic gradient was >40mmHg in 53% patients. AR was respectively graded 0, 1, 2, 3 and 4 in 51%, 19%, 13%; 8% and 8% by TTE which corresponded to a Reg Vol of 5.3±3.9mL, 16±3, 26±4, 37±5, and 57±9mL respectively as obtained by PCMR. There was no significant overlap between different Reg vol by PCMR and the 5 grade obtained by TTE; The relation between AR- Reg vol and grade by TTE was not significantly affected by the mean trans-aortic gradient (i.e >or <40mmHg).

Conclusion TTE as used in routine practice, allows a good discrimination and quantification of chronic AR when compared to that performed by CMR. However, PCMR can be an excellent alternative to TTE in patients who undergo TAVR in whom AR assessment by TTE is often challenging.

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0418

Comparison of pre- and post-operative characteristics in octogenarians having isolated surgical aortic valve replacement before versus after introduction of transcatheter aortic valve implantation

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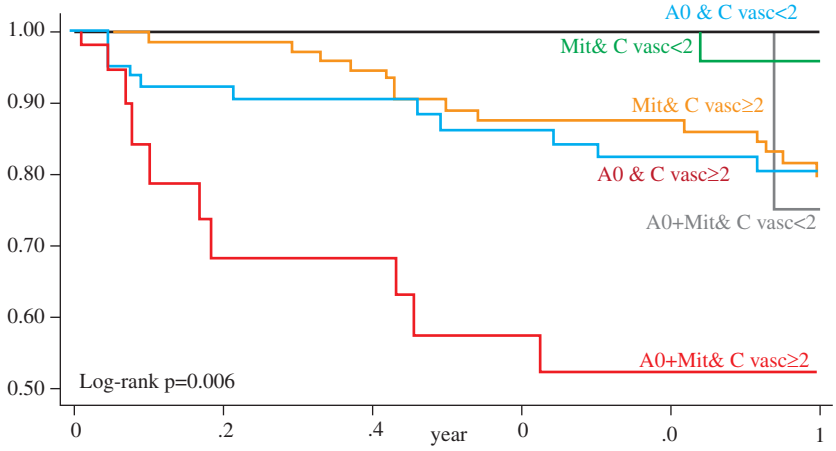

Abstract 0382 – Figure